Listing of Claims:

1. (currently amended) A method of producing a superabsorbent polymer product for use in agricultural applications, comprising:

providing grafting reactants and a starch;

graft polymerizing the grafting reactants onto the starch to form a starch graft copolymer;

saponifying the starch graft copolymer;

precipitating the saponified starch graft copolymer; and

granularizing the precipitated starch graft copolymer to forming granules of superabsorbent polymer product sized for use in agricultural applications by pelletizing the starch graft copolymer, the granules having a size that is between about 5 mesh and about 25 mesh and a density that is between about 30 pounds per cubic foot and about 35 pounds per cubic foot.

- 2. (original) The method of claim 1, wherein the grafting reactants include an initiator and an acrylonitrile.
- 3. (currently amended) The method of claim 2, wherein the grafting reactants further include a chemical selected from the <u>a</u> group consisting essentially of acrylic acid, acrylamide, and 2-acrylonitrile-2-methyl-propanesulfonic acid.
- 4. (original) The method of claim 2, wherein the starch and the acrylonitrile are present in a weight ratio of between about 1:2 and about 1:5.
 - 5. (original) The method of claim 2, wherein the initiator is a cerium salt.
- 6. (original) The method of claim 2, wherein the initiator is ceric ammonium nitrate.
- 7. (original) The method of claim 1, wherein the starch is selected from a group consisting essentially of pure starches, flours, and meals.
 - 8. (original) The method of claim 1, wherein the starch is a gelatinized starch.
 - 9. (original) The method of claim 1, wherein the starch is cornstarch.
 - 10. (canceled)
 - 11. (canceled)
- 12. (currently amended) The method of claim 10 1, wherein the particle size is between about 8 mesh and about 25 mesh.

- 13. (original) The method of claim 1, wherein precipitating the saponified starch graft copolymer involves mixing an alcohol with the saponified starch graft copolymer.
- 14. (currently amended) The method of claim 13, wherein the alcohol is selected from [the] <u>a</u> group consisting essentially of methanol, ethanol, propanol, and isopropanol. Claims 15-19 (canceled).
- 20. (original) A superabsorbent polymer product for use in agricultural applications made in accordance with the method of claim 1.
- 21. (new) A method of producing a superabsorbent polymer product for use in agricultural applications, comprising:

graft polymerizing grafting reactants onto a starch to form a starch graft copolymer;

saponifying the starch graft copolymer;

precipitating the starch graft copolymer; and

forming granules of superabsorbent polymer product by passing the starch graft copolymer through a die plate, the granules having a size that is between about 5 mesh and about 25 mesh and a density that is between about 30 pounds per cubic foot and about 35 pounds per cubic foot.

- 22. (new) The method of claim 21, wherein the grafting reactants include an initiator and an acrylonitrile.
- 23. (new) The method of claim 21, wherein the grafting reactants further include a chemical selected from a group consisting essentially of acrylic acid, acrylamide, and 2-acrylonitrile-2-methyl-propanesulfonic acid.
- 24. (new) The method of claim 22, wherein the starch and the acrylonitrile are present in a weight ratio of between about 1:2 and about 1:5.
 - 25. (new) The method of claim 22, wherein the initiator is a cerium salt.
- 26. (new) The method of claim 21, wherein the starch is selected from a group consisting essentially of pure starches, flours, and meals.
 - 27. (new) The method of claim 21, wherein the starch is a gelatinized starch.
 - 28. (new) The method of claim 21, wherein the starch is cornstarch.
- 29. (new) The method of claim 21, wherein the size is between about 8 mesh and about 25 mesh.

- 30. (new) The method of claim 1, wherein the process of pelletizing includes extruding the starch graft copolymer into strands and grinding the strands to form the granules.
 - 31. (new) The method of claim 1, further comprising: drying the granules of superabsorbent polymer product.
 - 32. (new) The method of claim 21, further comprising: drying the granules of superabsorbent polymer product.